Idaho Naturalist news

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INSIDE THIS ISSUE:

The Idaho Naturalist News is a quarterly newsletter of the Idaho Master Naturalist Program.

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Vegetation Monitoring Project

Lori Getts, Pend Oreille Master Naturalist

In northwest Idaho, near Priest Lake, is Hager Lake, a 5-acre pond formed in a depression left with the retreat of the glaciers. It now contains a valley peatland of high biodiversity. A peatland is a wetland with waterlogged substrates and at least a 12-inch accumulation of peat where lack of oxygen and cool temperatures limit decomposition.

Archie and Mary George were looking for land in the country with positive natural characteristics. With the help of the Nature Conservancy they located and bought the Hager Lake property and established a conservation easement to protect it from development. The easement is now held by the Inland Northwest Land Trust and is permanent and stays with the land through sales and inheritance.

There are at least 10 species of rare native plants that have been found in the Hager Lake area in past surveys. A group of Pend Oreille Master Naturalists and other volunteers led by Derek Antonelli are surveying plant species and visited the site on May 18-19 and June 1-2. Additional visits will be made in July and September.

Top photo: Western Toad. Bottom row left to right: morel mushroom, white violet and calypso orchid. Photos courtesy Selma Bair

Ode to Father's Day, 2012

Bill and Clella Steinke, Idaho Falls Master Naturalists

For Father's Day, Bill found a bat.
He showed me just where it was at.
Gloves, towel and a stick.
Came out with a "click."
Outside to the tree. That was that!

Bill and Clella Steinke are Upper Snake Master Naturalists volunteering Friday through Sunday at the Sand Creek Wildlife Management Area for the summer.

Photo courtesy Clella Steinke.

Limiting Your Liability

Sara Focht, IMNP State Coordinator

The Idaho Master Naturalist Program is unique in the sense that one agency houses the program (Idaho Department of Fish and Game), but many agencies and organizations sponsor chapters and provide volunteer opportunities. Because of this diverse sponsorship, the way you need to approach liability issues is also multifaceted. When you enroll in the IMNP, you sign an IDFG enrollment form that also signs you up as a volunteer for IDFG. This form protects you just like an employee would be protected while you are in the program volunteering for IDFG. But when you are out volunteering for other agencies or organizations, you are not covered with that enrollment form.

It is your responsibility to sign other agency's volunteer forms to limit your liability and to protect yourself. These policies are written in the IMNP Policy Manual under the Volunteer Service section on page 8 and the Program Compliance and Standards section on page 14. The Policy Manual is located on every chapter's webpage found at http://www.idahomasternaturalist.org. If you volunteer for an organization that does not have a volunteer program or has no volunteer forms explaining liability, just be aware that you are assuming liability. Signing the volunteer forms for all the organizations for which you volunteer is your responsibility! If you have further questions about liability as a Master Naturalist contact Sara Focht at sara.focht@idfg.idaho.gov.

Brigham Young University
Idaho Master Naturalists

Steph Johnsen, Upper Snake –BYU subchapter Master Naturalist

The Brigham Young University subchapter of the Upper Snake River Master Naturalists Chapter was formed in 2011. Students interested in certifying as Idaho Master Naturalists enroll in the Environmental Interpretation course through the Recreation Management Program in the Department of Health, Recreation and Human Performance. The second year group of students has been enjoying the 2012 spring semester learning about the ecosystems of the Upper Snake River Valley.

Professor Kari Archibald has arranged guest speakers to teach the students in the Master Naturalist curriculum. Guest speakers have included: Paul Martin (IDFG – Ashton Fish Hatchery), Rob Coleman (Ecology Professor at BYU Idaho), Bill Schiess (Vice President of the Upper Snake River Chapter of the Audubon Society), Ed Williams (retired Geology Professor at BYU Idaho), Van Christman (Entomology Professor at BYU Idaho), Theresa Lloyd (Upper Snake River Chapter of IMN), Andrew Sorenson (IDFG Conservation Officer), and Kyle Babbitt (Island Park Chapter of IMN). These guest instructors have opened the students' eyes to the forces that have created the beautiful and unique environment around them. Most of the class periods have been in the field visiting natural history displays on campus, the Ashton Fish Hatchery, Market Lake Wildlife Management Area, Menan Butte, Cress Creek Nature Trail, and the Rexburg Nature Park. Over the course of the semester students have begun to understand the need to start with basics in order to appreciate how an ecosystem works. Students started with a lesson in ecology from Rob Coleman, and Ed Williams expounded on that foundation by teaching the students about the tectonic forces that built the Tetons and are still shaping the area of southeastern Idaho.

When guest speakers are not in the classroom, the students are learning environmental education teaching techniques and activities. Much of what is covered is geared toward doing interpretive work with the public at specific sites. Educating visitors about the recreation resources they have available to them is important in order to instill the desire on the part of the public to become involved in natural resource issues. Students are required to do 20 hours of volunteer work for the class, and have enjoyed attending local events to help out.

Pend Oreille Chapter Adopts the Waterlife Discovery Center

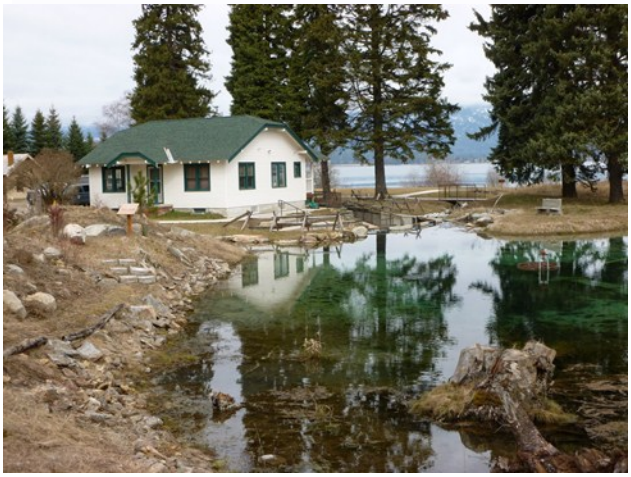
Gail Bolin, Pend Oreille Master Naturalist

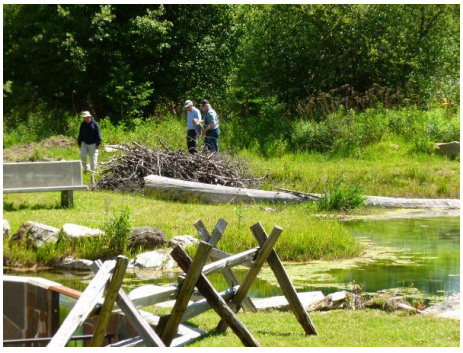
The Waterlife Discovery Center was originally built as a fish hatchery in 1909. Because fish could be raised cheaper elsewhere, the hatchery has been used primarily as a summer redistribution facility for rainbow trout since the mid-1990s. Fish and Game considered selling the property, but concerned citizens and community groups wanted a place for people of all ages to understand the role water plays in shaping our environment. Thus, the Waterlife Discovery Center (WDC) was born.

The facility is fast becoming the place for nature education in the region. Recently, the Pend Oreille Master Naturalist Chapter teamed up with the Kinnikinnick Native Plant Society and IDFG and offered a plant identification class. During May and June, the center hosted children from local elementary schools where they learned about aquatic macroinvertebrates, native fish, and the importance of wetlands.

The property consists of 3.5 acres of developed interpretive exhibits complete with an underwater viewing area, and a 6.5 acre forested wetland with trails and interpretive signs. Wildlife abounds on the center grounds and there is plenty of opportunity to see bald eagles, osprey, hawks, deer, moose, and of course fish.

The Waterlife Discovery Center is designed as a self-guided nature center and the grounds are always open. It's located just south of Sandpoint on the shores of the Pend Oreille River. To get there from Sandpoint, go south on Hwy 95 crossing over the Long Bridge; immediately turn west on Lakeshore Drive. Travel 1.5 miles to the center. For more information or to arrange for a tour, email the Pend Oreille Chapter at imn.sandpoint@gmail.com or contact IDFG at 208.769.1414.





Left: The Waterlife Discovery Center building; a classroom with a view! Lower Left: Master Naturalists Phil Degens, Dave Pietz, and Clem Yonker work at keeping the grounds tidy. Below: Clem Yonker cleans the fish viewing windows at the Waterlife Discovery Center. Photos courtesy Gail Bolin.

Wolverines

Janice Berndt, Sagebrush-steppe Chapter

One of nature's most mysterious mammals makes its home in the high mountains of Idaho. The **wolverine** [*Gulo gulo]* is a member of the Mustelidae family (weasel)—about the size of a medium dog. With long brown fur and yellow stripes that run from nose to tail, a common nickname for the wolverine is "skunk bear" since they look like a small bear and smell like a skunk.

Wolverines require snowy mountain terrain for survival. Their thick fur coat makes it easy for them to get too hot, so snow keeps them cool. Snow also provides a safe space to birth and raise their young. In February, female wolverines dig in the deep snow to reach natural cavities under boulders or downed trees, creating a den to insulate the kits from the cold and to hide them from predators. Although mating season is in the summer, females can hold fertilized eggs in suspension until winter and delay implantation until they are sure they have the resources to successfully raise their kits.

Wolverines are mostly meat-eaters, but will also eat roots, berries, bird eggs, and insect larvae. Their prey consists mainly of small mammals. They are primarily scavengers and may travel as much as 15 miles a day looking for food. Their strong sense of smell helps them find carrion buried deep under the snow and their large feet help them walk on the snow and dig deep. Powerful jaw muscles and a special molar at the back of the mouth allow them to eat frozen meat and break bones. Because wolverines are extremely ferocious, they don't have many predators; however, they are sometimes killed by wolves, bears or mountain lions.

North of the 54th parallel, wolverines are widespread; however, further south, wolverines face many challenges posed by the isolated islands of suitable habitat. Since wolverines are snow dependent for reproduction, they also face the prospect of diminished habitat due to climate change. They require a very large home range—the range of a male wolverine can be more than 240 square miles.

There are some who think that logging and winter recreationists threaten habitat. A research project in central Idaho is currently trying to assess the risk of den disturbance from snowmobilers and backcountry skiers. This study began in the Payette National Forest and is now adding new study areas in the Sawtooth and Boise National Forests. Research is also being conducted in northern Idaho. A January 2012 story in the *Spokesman Review* newspaper indicated that more than 40 volunteers showed up for a training course in December to learn how to use their expertise in backcountry snowshoeing and ski touring to help researchers study wolverines in the Cabinet Mountains northeast of Lake Pend Oreille. Last winter Idaho Department of Fish and Game biologists discovered a wolverine had been caught on camera in the Selkirk Mountains of North Idaho.

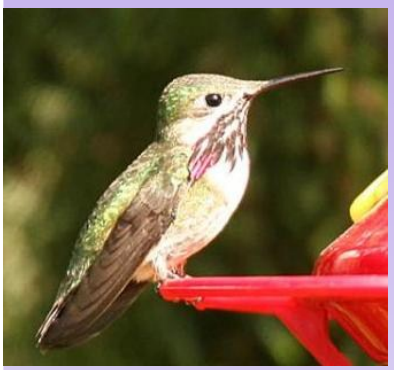
Wolverine photo courtesy IDFG

Environmental organizations have petitioned for listing the wolverine under the Endangered Species Act three times, and although the US Fish and Wildlife Service determined that wolverines do face substantial threats, there is no funding to implement a recovery plan at this time. Currently, wolverines are protected in Idaho.

Hummingbird Feeding Tips

Valle Novak, Pend Oreille Master Naturalist

An old Native American legend tells us that Gitche Manitou—the Great Spirit—created the mosquito to keep young lovers chaste. When things might be getting hot and heavy by the stream or on the beach, Brother Mosquito would nip and bite and buzz maddeningly to send the young folks home in a hurry, virtue intact.



Male Calliope Hummingbird, photo courtesy Dave Herr, USFWS Digital Library

Perhaps the annoying insect was really created to feed bats and birds. While out in the garden one day, wishing those fliers would get down to the job a bit better, I witnessed a surprising thing. A hummingbird shot into a cloud of mosquitoes, grabbed one in its long bill and disappeared! I knew hummers ate small insects but wasn't aware that the mosquito was included. Inwardly cheering the little hero, I hurried into the house to cook up another batch of nectar for the hummingbird feeders.

Rufous Hummingbird, photo courtesy Dave Herr, USFWS digital library

And therein lies the reason for this column. Many of us feed the hummingbirds and I always figured that everyone made their own nectar. It's so simple, after all. Bring four cups of fresh cold tap water to a boil, add one cup of pure granulated sugar. I use C&H Cane sugar rather than beet or corn sugar, but it probably doesn't matter—just so it's plain white granulated sugar. Let it boil a minute or so till completely dissolved, remove from heat to cool and refrigerate till time to put into the feeder. No color is necessary as most feeders have red on them as an attractant anyhow. Now, how hard is that?

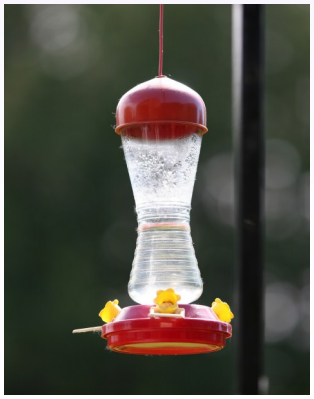
If it's that simple, why do people buy pre-made or nectar mix? Why is it even on the market? It's obviously a money-maker for someone, but it's certainly not healthy for the tiny birds! I had mentioned to my oldest daughter that I needed another hummingbird feeder, and so she kindly bought me a very pretty one—already filled with nectar! I had never really given it a thought before, but when I read the ingredients I was aghast! There were about seventeen listed, beginning with distilled water, fructose, sucrose—and on and on from there including artificial red food coloring (bad enough for humans let alone tiny hummingbirds) and three added vitamins, plus some added minerals!

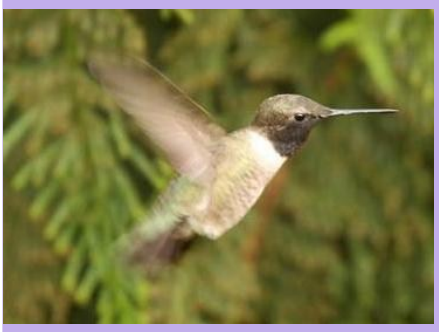
Article continues on next page

Homemade Hummingbird Nectar

1. Mix 1 cup of granulated white sugar for every 4 cups of water.
2. Boil the mixture.
3. Let the nectar cool , then pour into feeder.

- Do not use red food coloring.
- Do not use molasses, honey, or brown sugar in your mixture because it causes fungus to grow on hummingbird's tongues!
- **Clean and refill feeders ONCE A WEEK!**





Black-chinned Hummingbird. Photo courtesy Dave Herr, USFWS Digital Library.

I wondered, was there really an altruistic scientist out there who had studied the systems of the hummingbird to discern what vitamins they needed? I sincerely doubt that. I dumped the stuff down the sink, rinsed out the bottle (thankfully glass, preferable to plastic, which degrades into its contents) and poured in my own nectar. If you are reading this, and have used purchased nectar, please reconsider and make your own. Unless you have found a simple, believable formula created, perhaps, by someone connected with the Audubon Society or other respected group, don't trust that stuff.

If someone decided to use, say, Splenda instead of granulated sugar, it would doubtless ultimately prove fatal to the tiny hummingbird, since it contains aspartame, as does Nutrasweet, Sweet and Low, and a host of other artificial sweeteners, all to be avoided at all costs. By the way, while natural and healthful for most humans, honey used in nectar is a no-no for hummingbirds! It lacks what they need in nutrition, and while they may drink it, they will literally starve to death on it!

We folks up north are blessed with a quite viable hummingbird population. Commonly seen are the rusty-colored brilliant-throated rufous hummingbird; the calliope, with its red-streaked chin color; the black-chinned hummingbird with glorious purple throat feathers; and the broad-tailed hummingbird, with its namesake broad-tailed feather spread.

Further south, in warmer climes, there are doubtless many more to enjoy. Their beauty is unbounded, their battles heroic, and the joy they bring is priceless. Please learn about yours, and treat them well!

Valle Novak is a member of the Pend Oreille Master Naturalists and is a lifetime journalist who loves all wildlife, including hummingbirds.

Don't forget native flowers!

When attracting and feeding native hummingbirds, don't forget their favorite food! Native flower nectar! Along with your hummingbird feeder, provide native plants!

Scarlet Gilia
Columbine
Penstemons
Sticky Geranium
Snowberry
Blue Columbine
Desert Four O' Clock
Prickly Pear Cactus
Coral-Bells
Scarlet runner beans
Lupine

Rocky Mountain Penstemon are a favorite of hummingbirds.

Teaching Kids About Insects

Kevin Laughlin, Sage-brush steppe Master Naturalist

Summer is filled with wonderful critters. Grasshoppers, butterflies, dragonflies, praying mantises, moths, ants and a honey bee hive are all right out my back door. The largest group of critters that we can see, and live with, are insects. If you can get children past the, "Oh ick, let's kill it*"* stage, the wonder of insects can occupy a whole summer. Bugs (a.k.a. insects) outnumber most of the rest of us living creatures. They're awesome! So this summer, teach Idaho kids to give our six-leggeds some respect! The planet could not survive without all the insects that pollinate, decompose, make silk and provide food for other animals.

True, some bite, or sting, or can leave yucky toxins on your hand, but most insects leave you alone. They are fun to watch and can keep children outside learning about the cycles of life. So, when the *"I'm bored"* comes, scoot them out the door with one of the following engaging ideas:

BUG HUNT—Take a sketch pad, pencils, some collecting jars (with holes in the lids), magnification lenses, and a pond or butterfly net and see what you can find in your backyard, local park or a nature area in your neighborhood. After you catch your insects, take a picture, draw them, and then please let them go. Take your collected work to the internet, a local library, or to a nature center and ask for help with identification. You can follow the insects through the week, month or summer and see how many, how big, or how long they live.

THE GARDEN PRIVATE EYE—Teach your children to observe and record changes that happen in a garden throughout a season. Twice a week record the changes in a garden ecosystem by watching plants, insects, and animals living in the garden for fifteen-minute periods. Take or draw a picture, write down the number, size, colors and types you see on index cards. You might even post the best pictures to a journal, blog or website. At the end of the season compare each week's notes and write a story about what you see.

INSECT EVENTS—Attend an insect-related event, like Bug Day (August 25 at the Idaho Botanical Garden, Boise), a camp or program sponsored by your school, YMCA, 4-H club, nature or garden center that focuses on insects.

BENEFICIAL CRITTERS—Insects can be predators, parasites, pollinators, and decomposers. Learning that there are many more good insects than bad insects can enhance children's understanding of how the nature cycles work. Use pictures, visit the Junior Master Gardeners' website (www.jmgkinds.us), or other provided websites to identify the harmful and helpful insect critters in your neighborhood. Guides to insects and organisms can be obtained for free from your library or the web.

Selected References

Junior Master Gardener Program (All the books): http://jmgkids.us/
Idaho Botanical Garden: http://idahobotanicalgarden.org
Insect Identification: http://insects.tamu.edu/extension/insctans/identification/
Insect identification Organization: http://www.insectidentification.org/
Home & Garden Toolbox for Insect Identification: http://www.pesticide.org/solutions/home-and-garden-toolbox
BioKids Insect Ideas: http://www.biokids.umich.edu/critters/Insecta/

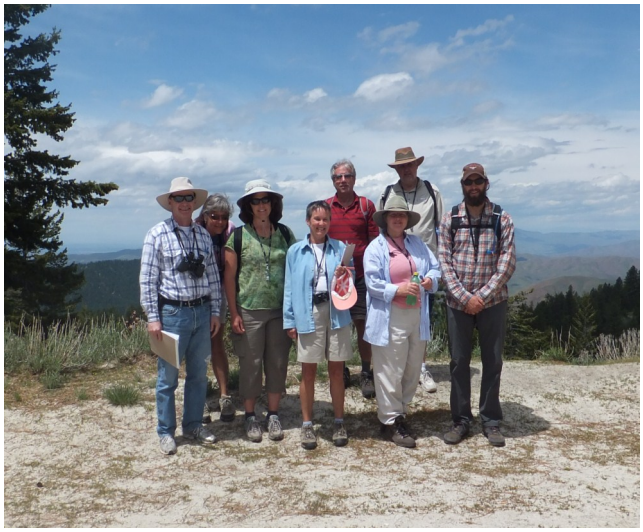
Dr. Kevin Laughlin lives in Garden City, Idaho. He is an Idaho Master Naturalist and retired University of Idaho Extension Educator. Much of his career has been focused on teaching, organizing and facilitating horticulture, gardening and especially children's gardening programs.

A Native Peony

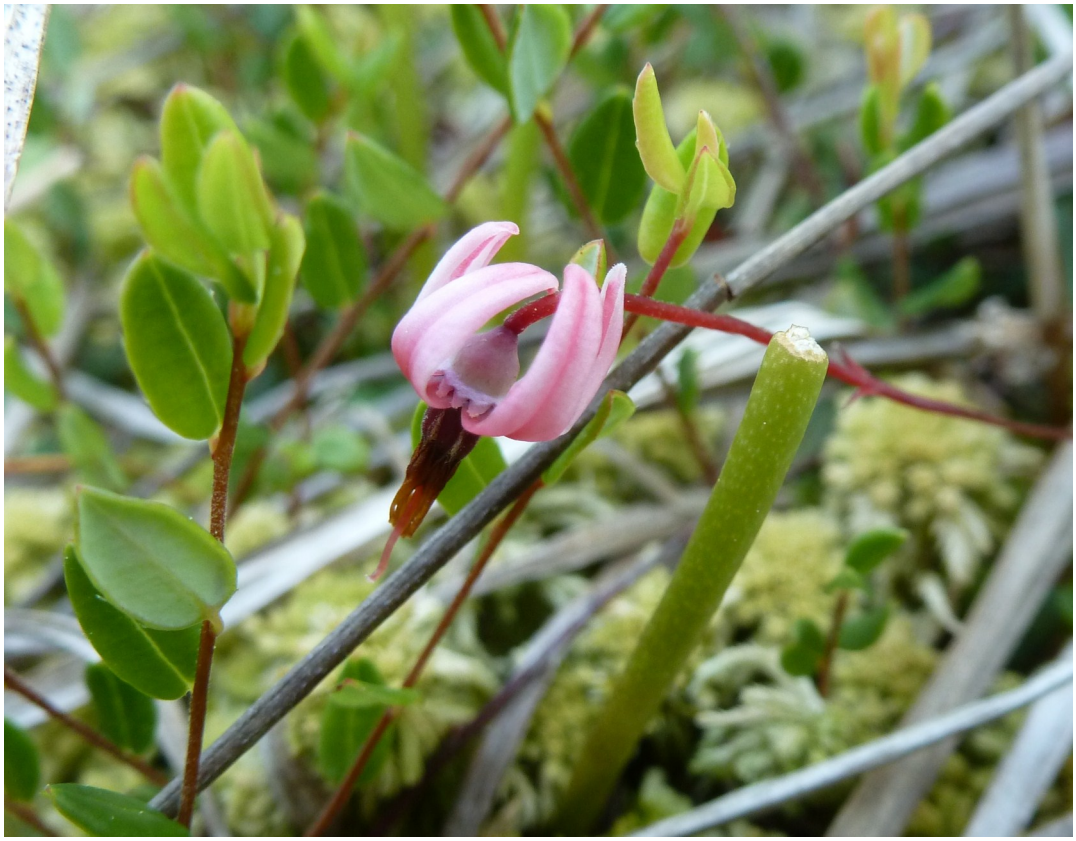
Sara Focht, IMNP State Coordinator

Brown's peony (Paeonia brownie). Photo courtesy Cassondra Skinner, BLM obtained from the USDA Plants Database.

On June 2nd, a few members of the Sagebrush-steppe Chapter had their final meeting of the season-a field trip that studied plants from the sagebrush flats to the top of the Boise Foothills. Our instructor was Michael Stefancic, an employee of the Student Conservation Association. Michael started the group off with a great plants talk, helping us learn how to classify plants and how to identify some of the common plant families. At Bogus Basin, the flowers were out and we found one plant that stumped us all. The Brown's peony is a native peony to the northwest. The flower buds look a lot like ornamental peonies but that is where the similarity ends. The petals of the native peony are maroon/brown and thick—almost succulent-like, not papery and pink like the ornamental version. The native flowers are smaller, only getting to be about 2 inches across. The whole plant is much smaller than the common ornamental variety only standing 1.5 feet high.



Sagebrush-steppe Master Naturalists Doug Bender, Chapter leader, Jennie Rylee, Master Naturalists Claudia Fugate, Judith Wojcicki, Bill Rath, Judith Reppell, Devon Koyle and field trip instructor Michael Stefancic. Photo courtesy Sara Focht.



Top Photo: The flower of the cranberry bog. Bottom Photo: The insectivorous English sundew. Both photos courtesy Pend Oreille Master Naturalist Derek Antonelli.